

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings and versions of claim in this application.

1-22. (Cancelled)

23. (Currently Amended) A method for operating a food product dispenser comprising:

dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path ~~which is operably associated with through~~ the food delivery mechanism to conduct a cleaning operation on at least a portion of the dispensing path, ~~and recirculating the cleansing fluid through the cleansing fluid path;~~

rinsing the at least a portion of the dispensing path after the cleaning operation to remove cleansing fluid therefrom;

directing hot water alone to the at least a portion of the dispensing path to conduct a sanitizing operation, ~~wherein the water is sufficiently hot to reduce microbiological deposits and the sanitizing operation occurs non-concurrently with the cleaning operation and rinsing for sanitizing the at least a portion of the dispensing path, and wherein the hot water is at a temperature which is sufficient to sanitize the at least a portion of the dispensing path; and~~

switching between the dispensing of the food or food component and conducting the cleaning and sanitizing operations at a plurality of time intervals.

24- 28. (Cancelled)

29. (Previously presented) The method of claim 23, wherein the sanitizing operation is conducted a plurality of times between the cleaning operations.

30. (Original) The method of claim 23, further comprising heating the cleansing fluid in the fluid path.

31. (Previously presented) The method of claim 23, further including automatically determining with a controller device when one of the cleaning and sanitizing operations will begin and sending one of a cleaning start signal and a sanitizing start signal, wherein the cleaning start signal automatically starts the cleaning operation and wherein the sanitizing start signal automatically starts the sanitizing operation.

32. (Cancelled)

33. (Cancelled)

34. (Previously presented) The method of claim 31, wherein the dispenser includes a source of cleansing fluid so that it is not necessary to connect an external source of cleansing fluid to perform the cleaning operation.

35. (Previously presented) The method of claim 23, conducted by a controller in a food product dispenser comprising the food delivery mechanism, which mechanism comprises:

a food source configured for receiving a food or food component,

a food conduit associated with the food source for receiving the food or food component therefrom, and

a dispensing mechanism configured for dispensing servings of the food or food component from the conduit along the dispensing path; and

the dispenser includes a first mechanism comprising a cleansing conduit operably associated with the food delivery mechanism for directing the cleansing fluid along the cleansing fluid path in cleansing association with the food delivery mechanism under conditions for performing the cleaning operation on at least a portion of the dispensing path;

wherein the controller is operably associated with the first mechanism for activating the first mechanism at the intervals to cleanse the portion of the dispensing path automatically in response to predetermined conditions, and the controller, delivery mechanism and first mechanism are configured to switch between the dispensing of the servings and the cleaning operation.

36. (Previously presented) The method of claim 35, which further comprises configuring the first mechanism for conducting the cleaning operation without interrupting delivery of the product.

37. (Previously presented) The method of claim 36, which further comprises providing the cleaning operation with a duration that is selected to interrupt the dispenser for between about 10 and about 20 minutes.

38-41. (Cancelled)

42. (Previously presented) The method of claim 35, which further comprises: configuring the first mechanism for performing the cleaning and sanitizing operations; and

configuring the controller for automatically operating the first mechanism for selectively conducting one of the cleaning and sanitizing operations, with the sanitizing operation conducted several times per day.

43-46. (Cancelled)

47. (Previously presented) The method of claim 46, which further comprises configuring the first mechanism to conduct the cleaning operation using a cleansing fluid selected from at least one of the group consisting of (i) a detergent, (ii) a caustic material, and (iii) an acid material, and the sanitizing operation using hot water.

48. (Previously Presented) The method of claim 35, which further comprises configuring the dispenser to dispense product servings of a single serving to about 10 servings at one time wherein each product serving is sized for consumption by an individual.

49. (Cancelled)

50. (Previously Presented) The method of claim 35, which further comprises configuring the first mechanism for recirculating the cleansing fluid through the cleansing fluid path.

51. (Previously Presented) The method of claim 50, which further comprises providing the dispenser with a heating device configured to heat the cleansing fluid as the cleansing fluid is recirculated through the cleansing fluid path.

52. (Previously Presented) The method of claim 50, which further comprises providing the first mechanism with a reservoir in fluid communication with the cleansing fluid path configured to hold a volume of the cleansing fluid.

53. (Previously Presented) The method of claim 35, which further comprises configuring the controller to activate the first mechanism at predetermined intervals for sanitizing a portion of the delivery mechanism.

54. (Previously Presented) The method of claim 35, which further comprises providing a dispenser housing that houses the food source, food conduit, dispensing mechanism and first mechanism.

55. (Previously presented) The method of claim 53, wherein the dispenser includes a source of food product and a source of cleansing fluid so that it is unnecessary for an operator to connect an external source of food product or cleansing fluid to perform a dispensing or cleaning operation.

56. (Previously Presented) The method of claim 35, wherein the first mechanism is operably associated with the food conduit and dispensing path and is configured to cleanse the food conduit and dispensing mechanism.

57. (Previously presented) The method of claim 23, wherein the food product is a milk-based product, and the hot water has a temperature of between about 75°C and about 95°C.

58. (Currently Amended) A method for operating a food product dispenser comprising:

dispensing a food or food component product that is milk based from a food delivery mechanism along a dispensing path;

conducting a cleaning operation on at least a portion of the dispensing path by directing a cleansing fluid along a cleansing fluid path ~~which is operatively associated with~~ through the food delivery mechanism and dispensing path, and recirculating the cleansing fluid through the cleansing fluid path;

conducting a sanitizing operation by directing hot water alone along the at least a portion of the dispensing path, wherein the hot water is at a temperature which is sufficiently hot to reduce microbiological deposits and sanitize that portion of the dispensing path that has encountered the milk based product; and

switching between the dispensing of the food or food component and the conducting the cleaning operation at a plurality of intervals during a day automatically according to a time controlled cleansing program or upon request of an operator.

59. (Cancelled)

60. (Previously presented) The method of claim 58, wherein the hot water has a temperature between about 70° C and about 95° C and is directed along the fluid path at a velocity between about 0.2 to 2.0 m/s to cause flow along the fluid path and to sanitize the at least a portion of the dispensing path.

61. (Previously Presented) The method of claim 60, wherein the hot water is directed at intervals occurring once about every 10 minutes to about every 12 hours and with the interval including a fluid directing time period of between about 30 seconds and about 30 minutes during which period the dispensing of the food product is interrupted.

62. (Currently Amended) A method for operating a food product dispenser comprising:

dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path ~~which is operatively associated with~~ through the food delivery mechanism to conduct a first cleaning operation on at least a portion of the dispensing path, and recirculating the cleansing fluid through the cleansing fluid path;

directing cleansing fluid along a cleansing fluid path ~~which is operably associated with~~ through the food delivery mechanism to conduct a second cleaning operation on the at least a portion of the dispensing path, wherein the second cleaning operation occurs a period of time after the first cleaning operation;

rinsing the at least a portion of the dispensing path to remove cleansing fluid therefrom;

directing hot water alone to at least a portion of the dispensing path to conduct at least one sanitizing operation during the period of time between the first and second cleaning operations, wherein the hot water is at a temperature which is sufficiently hot to reduce microbiological deposits and sanitize at least a portion of the dispensing path; and

switching between the dispensing of the food or food component and conducting the cleaning and sanitizing operations at a plurality of time intervals.

63. (Cancelled)

64. (Cancelled)

65. (Currently amended) A method for operating a food product dispenser comprising:

delivering water from a water supply to a food delivery path;

mixing a food or food component with the delivered water;

dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path ~~which is operably associated with~~ through the food delivery mechanism to conduct a cleaning operation on at least a portion of the dispensing path, and recirculating the cleansing fluid through the cleansing fluid path;

rinsing the at least a portion of the dispensing path after the cleaning operation to remove cleansing fluid therefrom;

directing hot water from the water supply to the at least a portion of the dispensing path to conduct a sanitizing operation, wherein the water is sufficiently hot to reduce microbiological deposits, ~~and~~ the sanitizing operation occurs non-concurrently with the cleaning operation and ~~the rinsing for sanitizing the at least a portion of the dispensing path, and wherein~~ the hot water is at a temperature which is sufficient to sanitize the at least a portion of the dispensing path; and switching between the dispensing of the food or food component and conducting the cleaning and sanitizing operations at a plurality of time intervals.

66. (Currently amended) A method for operating a food product dispenser comprising:

dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path ~~which is operably associated with through~~ the food delivery mechanism to conduct a cleaning operation on at least a portion of the dispensing path, ~~and recirculating the cleansing fluid through the cleansing fluid path;~~

recirculating the cleansing fluid through the cleansing fluid path;

rinsing the at least a portion of the dispensing path after the cleaning operation to remove cleansing fluid therefrom;

directing hot water to the at least a portion of the dispensing path to conduct a sanitizing operation, wherein the water is sufficiently hot to reduce microbiological deposits, ~~and~~ the sanitizing operation occurs non-concurrently with the cleaning operation and ~~the rinsing for sanitizing the at least a portion of the dispensing path, and wherein~~ the hot water is at a temperature which is sufficient to sanitize the at least a portion of the dispensing path; and

switching between the dispensing of the food or food component and conducting the cleaning and sanitizing operations at a plurality of time intervals.

67. (New) The method of claim 51, wherein the cleansing fluid has a first temperature in the portion of the dispensing path at the beginning of the cleaning operation, and the cleansing fluid is recirculated through the cleansing fluid path to be heated by the heater increase the temperature during the recirculation in the cleaning operation.